CLAIM AMENDMENTS:

1. (Original) An apparatus for positioning of an object in at least one plane comprising:

a holding member configured to hold the object to be positioned;

a first axis positioning system, wherein the first positioning system comprises a first set of flexure linkages coupled to the holding member, wherein the first set of flexure linkages is configured to constrain movement of the holding member to a substantially linear motion along a first axis; and

a second axis positioning system, wherein the second positioning system comprises a second set of flexure linkages coupled to the holding member, wherein the second set of flexure linkages is configured to constrain movement of the holding member to a substantially linear motion along a second axis.

2. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members.

3. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members, and wherein two or more elongated members are flexibly coupled to form each linkage.

4. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together.

5. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein each flexible joint is configured to allow rotation of the joint around at least a degree range of motion.

6. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein each flexible

joint is configured to allow rotation of the joint around at least a 40 degree range of motion.

7. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein the flexible joints contain substantially no frictional contact.

8. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints furthers comprises a rolling contact joint.

9. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints further comprises a rolling contact joint; and wherein each rolling contact joint is configured to constrain the motion of two elongated members of a linkage such that the two elongated members rotate about the joint at substantially the same rate and in opposite directions during use.

10. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints further comprises a rolling contact joint; and wherein each rolling contact joint is configured to ensure substantially continuous and even contact within the joint over the entire range of motion of the joint.

11. (Original) The apparatus of claim 1, further comprising at least one motive device coupled to the holding member.

12. (Original) The apparatus of claim 1, further comprising at least one motive device coupled to the holding member, wherein each motive device comprises a magnetic linear servomotor.

13. (Original) The apparatus of claim 1, wherein the holding member comprises a wafer chuck.

14. (Original) The apparatus of claim 1, wherein the holding member is configured to hold a semiconductor substrate.

15. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages each comprise at least two symmetrical flexure linkages.

16. (Original) The apparatus of claim 1, wherein the first and second sets of flexure linkages each comprise at least two symmetrical flexure linkages, and wherein the apparatus is configured to avoid any kinematic singularities resulting from the symmetry.

17. (Original) An apparatus for positioning of an object along a first axis comprising a holding member configured to hold the object to be positioned;

a first set of flexure linkages coupled to the holding member; and

a motive device coupled to the holding member for moving the holding member;

wherein the first set of flexure linkages constrains the motion of the holding member to a substantially linear motion.

18. (Original) The apparatus of claim 17, wherein the first set of flexure linkages constrains the motion of the holding member to a single plane.

19. (Original) The apparatus of claim 17, wherein the first set of flexure linkages comprises at least two opposed symmetrical linkages.

20. (Original) The apparatus of claim 17, wherein the first set of flexure linkages comprises at least two symmetrical flexure linkages, and wherein the apparatus is configured to avoid any kinematic singularities resulting from the symmetry.

21. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together.

22. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together,

and wherein each flexible joint is configured to allow rotation of the joint around at least a 20 degree range of motion.

23. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together, and wherein each flexible joint is configured to allow rotation of the joint around at least a 40 degree range of motion.

24. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together, and wherein the flexible joints have substantially no frictional contact.

25. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together, wherein at least one of the joints further comprises a rolling contact joint.

26. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together, wherein at least one of the joints further comprises a rolling contact joint, and wherein each rolling contact joint is configured to constrain the motion of two elongated members of the linkage such that the two elongated members rotate about the joint at substantially the same rate and in opposite directions during use.

27. (Original) The apparatus of claim 17, wherein each of the flexure linkages comprise elongated members and flexible joints coupling the elongated members together, wherein at least one of the joints further comprises a rolling contact joint; and wherein each rolling contact joint is configured to ensure substantially continuous and even contact within the joint over the entire range of motion of the joint.

28. (Original) The apparatus of claim 17, wherein the motive device comprises a magnetic linear servomotor.

29. (Original) The apparatus of claim 17, wherein the holding member comprises a wafer chuck.

30. (Original) The apparatus of claim 17, wherein the holding member is configured to hold a semiconductor wafer.

31. (Original) An apparatus for positioning of an object along a first axis and a second axis comprising:

a holding member configured to hold the object to be positioned;

a platform coupled to the holding member;

a first set of flexure linkages coupled to the holding member and the platform;

a second set of flexure linkages coupled to the platform;

a first motive device coupled to the holding member, wherein the first motive device is configured to move the holding member in relation to the platform along a first axis; and

a second motive device coupled to the platform, wherein the second motive device is configured to move the platform along a second axis;

wherein the first set of flexure linkages constrains the motion of the holding member substantially to a single plane along the first axis; and

wherein the second set of flexure linkages constrains the motion of the platform to a single plane along the second axis.

32. (Original) The apparatus of claim 31, wherein the first set of flexure linkages comprises at least two opposed symmetrical linkages.

33. (Original) The apparatus of claim 31, wherein the second set of flexure linkages comprises at least two opposed symmetrical linkages.

34. (Original) The apparatus of claim 31, wherein the first set of flexure linkages comprises at least two opposed symmetrical linkages, and wherein the second set of flexure linkages comprises at least two opposed symmetrical linkages.

35. (Original) The apparatus of claim 31, wherein the first set of flexure linkages comprises at least two opposed symmetrical linkages, wherein the second set of flexure linkages comprises at least two opposed symmetrical linkages, and wherein the apparatus is configured to avoid any kinematic singularities resulting from the symmetry.

36. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members.

37. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members, and wherein the elongated members are flexibly coupled to form the linkages.

38. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together.

39. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein each flexible joint is configured to allow rotation of the joint around at least a 20 degree range of motion.

40. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein each flexible joint is configured to allow rotation of the joint around at least a 40 degree range of motion.

41. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein the flexible joints contain no frictional contact.

42. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints further comprises a rolling contact joint.

43. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints further comprises a rolling contact joint, and wherein each rolling contact joint is configured to

constrain the motion of two elongated members of the linkage such that the two elongated members rotate about the joint at substantially the same rate and in opposite directions during use.

44. (Original) The apparatus of claim 31, wherein the first and second sets of flexure linkages comprise a plurality of elongated members and flexible joints coupling the elongated members together, and wherein at least one of the joints further comprises a rolling contact joint; and wherein each rolling contact joint is configured to ensure substantially continuous and even contact within the joint over the entire range of motion of the joint.

45. (Original) The apparatus of claim 31, wherein the first motive device comprises a magnetic linear servomotor.

46. (Original) The apparatus of claim 31, wherein the second motive device comprises a magnetic linear servomotor.

47. (Original) The apparatus of claim 31, wherein the first and second motive devices comprise magnetic linear servomotors.

48. (Original) The apparatus of claim 31, wherein the holding member comprises a wafer chuck.

49. (Original) The apparatus of claim 31, wherein the holding member is configured to hold a semiconductor substrate.

50. (Original) An apparatus for positioning of an object comprising:

a holding member configured to hold the object to be positioned;

a plurality of flexure linkages coupled to the holding member, wherein the flexure linkages are configured to constrain movement of the holding member within a predetermined range of motion; and

wherein the ratio of the range of motion of the holding member to a characteristic length of the apparatus is greater than 0.05.

62. (Canceled) A system for forming a pattern on a substrate comprising:

a patterning device; and

a substrate positioning device, the substrate positioning device comprising:

a holding member configured to hold the substrate;

a first axis positioning system, wherein the first axis positioning system comprises a first set of flexure linkages coupled to the holding member, wherein the first set of flexure linkages is configured to constrain movement of the holding member to a substantially linear motion along a first axis; and

a second axis positioning system, wherein the second axis positioning system comprises a second set of flexure linkages coupled to the holding member, wherein the second set of flexure linkages is configured to constrain movement of the holding member to a substantially linear motion along a second axis.

167. (Canceled) A method of forming a pattern on a substrate with a patterned template comprising:

positioning a substrate on a substrate positioning device, wherein the substrate positioning device is coupled to an imprint lithography device comprising the patterned template, and wherein the substrate positioning device comprises:

a holding member configured to hold the substrate;

a first axis positioning system, wherein the first axis positioning system comprises a first flexure linkage coupled to the holding member, wherein the first flexure linkage is configured to constrain movement of the holding member to a, substantially linear motion along a first axis; and

a second axis positioning system, wherein the second axis positioning system comprises a second flexure linkage coupled to the holding member, wherein the second flexure linkage is configured to constrain movement of the holding member to a substantially linear motion along a second axis. applying an activating light curable liquid to a portion of the substrate;

positioning the patterned template and the substrate in a spaced relation to each other so that a gap is created between the patterned template and the substrate, wherein the applied liquid
substantially fills the gap when the patterned template is placed in a spaced relation to the substrate;

applying activating light to the liquid, wherein the application of activating light substantially cures the liquid, and wherein a pattern of the patterned template is formed in the cured liquid; and

separating the patterned template from the cured liquid.